



U.S. Department  
of Transportation  
**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

November 4, 2022

Ms. Megan O'Connor  
EHS Contractor  
Pilot Chemical Company  
9075 Centre Pointe Dr., Suite 400  
West Chester, OH 45069

Reference No. 22-0083

Dear Ms. O'Connor:


This letter is in response to your August 12, 2022, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the shipping description for organic peroxide formulations. Specifically, for a hazardous material classified and described as "UN3109, Organic peroxide type F, liquid, 5.2" you ask whether a concentration is required to be included in association with the technical name for "Peroxyacetic acid, type F, stabilized" as listed in the § 173.225(c) organic peroxide table. You state your belief that the addition of a concentration (i.e.,  $\leq 43\%$ ) for this organic peroxide formulation would be redundant because any shipment using that technical name as part of the hazardous materials description would by definition contain no more than 43% peroxyacetic acid.

The answer is no. The organic peroxide concentration is only required to be included with the technical name for organic peroxides which may qualify for more than one generic listing. For such instances, the technical name must include the actual concentration being shipped or the concentration range for the appropriate generic listing. For example, "UN3102, Organic peroxide type B, solid, 5.2, (dibenzoyl peroxide, 52-100%)" or "UN3108, Organic peroxide type E, solid, 5.2, (dibenzoyl peroxide, paste,  $<52\%$ )". See § 172.203(k).

Finally, please note that, while you are not required to indicate that the concentration of peroxyacetic acid is not more than 43%, including the concentration in association with the technical name would not be prohibited.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dirk Der Kinderen". The signature is fluid and cursive, with the first name "Dirk" being the most prominent part.

Dirk Der Kinderen  
Chief, Standards Development Branch  
Standards and Rulemaking Division

**From:** [INFOCNTR \(PHMSA\)](#)  
**To:** [Dodd, Alice \(PHMSA\)](#); [Hazmat Interps](#)  
**Subject:** FW: Formal Letter of Interpretation Request - Organic Peroxide Concentrations  
**Date:** Monday, August 15, 2022 4:32:03 PM  
**Attachments:** [image001.png](#)

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Hello Alice,  
Please see the request for an LOI below. Thank you.  
Rachel (HMIC)

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**From:** Megan E. O'Connor <meoconnor@pilotchemical.com>  
**Sent:** Friday, August 12, 2022 12:35 PM  
**To:** INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>  
**Cc:** Megan R. Landers <mrlanders@pilotchemical.com>  
**Subject:** Formal Letter of Interpretation Request - Organic Peroxide Concentrations

**CAUTION:** This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Mr. Shane Kelley  
Director, Standards and Rulemaking Division  
U.S. DOT/PHMSA (PHH-10)  
1200 New Jersey Avenue, SE East Building, 2nd Floor  
Washington, DC 20590

Dear Mr. Kelley,

We are requesting a formal letter of interpretation to determine if concentration ranges of the organic peroxide component are required in the technical name for Class 5.2 organic peroxides whose technical name only appears once on the Organic Peroxide table from 49 CFR 173.225(c).

Specifically we are inquiring about the requirements of "UN 3109, Organic peroxide type F, liquid, 5.2, (Peroxyacetic acid, type F, stabilized)." Does the concentration range of peroxyacetic acid need to be included in the technical name?

49 CFR 172.203(k) states:

"For organic peroxides which may qualify for more than one generic listing depending on concentration, the technical name must include the actual concentration being shipped or the concentration range for the appropriate generic listing. For example, "UN 3102, Organic peroxide type B, solid, 5.2, (dibenzoyl peroxide, 52-100%)" or "UN 3108, Organic peroxide type E, solid, 5.2, (dibenzoyl peroxide, paste, <52%)"

It gives the example of "Dibenzoyl Peroxide" which has 11 separate entries on the organic peroxide table, some of which have the same UN number. The only way to distinguish between some of these entries would be to give the concentration range. Our understanding is the concentration of the

organic peroxide is required only to distinguish between two otherwise identical technical names. Therefore the shipping name, "UN 3109, Organic peroxide type F, liquid, 5.2, (Peroxyacetic acid, type F, stabilized, <43%)" would be redundant because any shipment using that technical name would by definition contain peroxyacetic acid  $\leq 43\%$ . We believe the correct shipping name would be, "UN 3109, Organic peroxide type F, liquid, 5.2, (Peroxyacetic acid, type F, stabilized)," and the concentration is not required in this case.

Please let us know if we are correct in our understanding. Thank you very much for your help.

Sincerely,

Name: Megan O'Connor

Organization: Pilot Chemical Company

Phone: 513-996-7927

Address: 9075 Centre Pointe Dr., Suite 400, West Chester, OH 45069

Email: [meoconnor@pilotchemical.com](mailto:meoconnor@pilotchemical.com)

**Megan E. O'Connor**

**EHS CONTRACTOR**

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